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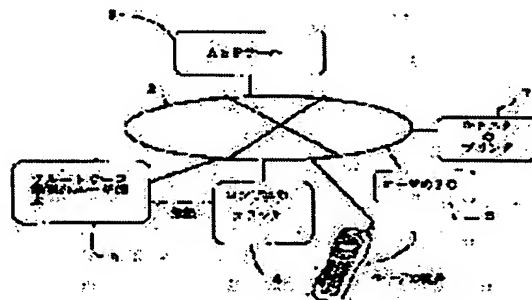|	
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(54) SYSTEM AND METHOD FOR SUPPLYING SERVICE FOR PRINTING OUT DATA THROUGH COMMUNICATION NETWORK

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a system for supplying service for printing out data to an outer printer from a portable terminal even in an environment where a printer device does not exist. SOLUTION: In the system and the method for supplying service for printing out data, service for printing out data to a print device connected to a communication network in accordance with a request from a user terminal connected to the communication network is given. The print request is sent from the user terminal to the server of a print service supplied through the communication network. Data are read from a memory area allocated to store data of the user of the memory device of the server in accordance with the print request, and data are transmitted to the print device through the communication network. The print device prints out data transmitted from the server and charges the user in accordance with the printing out of data.

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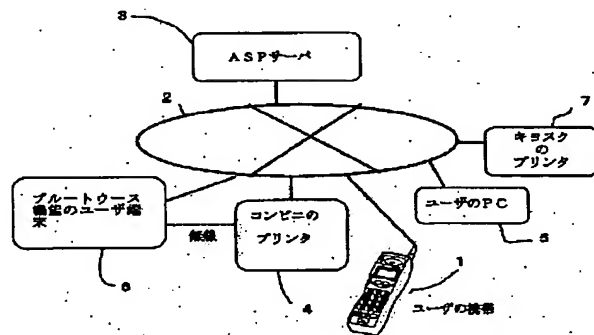| (51)Int.Cl.⁷		識別記号	FI			テーマコード（参考）
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審査請求　有　請求項の数10　書面　（全 5 頁）　最終頁に続く

(54)【発明の名称】　通信ネットワークを介してデータをプリントアウトするサービスを提供するシステムおよびその方法

(57)【要約】

【課題】　プリンタ装置のない環境であっても、外部のプリンタに携帯端末からデータをプリントアウトをさせるサービスを提供するシステムを課題とする。

【解決手段】　本発明によるプリントアウトするサービスを行うシステムと方法は、通信ネットワークに接続したユーザ端末からの要求に応じて前記通信ネットワークに接続したプリント装置にデータをプリントアウトするサービスを行うものであって、前記ユーザ端末からプリントサービス提供者のサーバに対して前記通信ネットワークを介して印刷要求を送り、前記印刷要求に応じて、前記サーバのメモリ装置の前記ユーザのデータを格納するために割り当てられたメモリ領域から該データを読み出して前記通信ネットワークを介して前記プリント装置に前記データを送信し、前記プリント装置が前記サーバから送信されたデータをプリントアウトし、　前記データのプリントアウトに応じた課金を前記ユーザに対して行う。

たないパーソナルコンピュータ（以下、パソコンと称する。）やＰＤＡと呼ばれる携帯情報処理端末装置、あるいは携帯電話（ＰＨＳも含む。）などから、所望のデータ（文書や画像）を外部の所定の場所に配置されているプリント装置からプリントアウトするサービスを提供するためのシステムと方法とに関する。

【０００２】
【従来の技術】いわゆるラップトップパソコンやＰＤＡなどと呼ばれる携帯型の小型パソコンなど（以下、そのようなものを総称して携帯端末と称する。）では、一般にプリンタは付属しておらず、作成した文書をプリントアウトするためには端末と適合するプリンタのある場所に出向いて携帯端末を接続してプリントする必要がある。従って、プリンタのない場所や、携帯端末とインターフェースが適合しないプリンタしかない場合には、作成した文書をプリントアウトすることができないので不便である。

【０００３】たとえば、営業社員が出先で顧客と契約書を取り交わす商談場面において、契約のための見積書を顧客に提示したとする。顧客がその見積書の内容に同意せず、見積内容の変更たとえば、注文の商品の数や種類あるいは金額等が変更になった場合、見積書をその場ですぐに書き換えて契約することが望ましい。

【０００４】しかし、見積書の内容変更は携帯端末を使って行えたとしてもプリンタがその近くにないと新たな見積書を発行することができない。従来は、見積書の内容変更が生じた場合には、一旦営業社員は自社に戻り、自社内のパソコン等で見積書を書きなおしてから、再度顧客とアポイントメントを取って、もう一度顧客の会社に出向くことになるために非常に手間と時間がかかり、スムーズな取引業務が行えない。また、見積書の間違いや印刷ミスなどが顧客の所で発見されてもすぐに修正の対応ができないという不便もあった。

【０００５】
【発明が解決しようとする課題】本発明は、上記の問題点を解決し、自らの携帯端末装置にプリンタ装置のない環境であっても、サービス会社により各所に配置されたプリンタに携帯端末からデータをプリントアウトをさせるサービスを提供することを目的とするものである。

【０００６】
【課題を解決するための手段】本発明によるプリントアウトするサービスを行うシステムと方法は、通信ネットワークに接続したユーザ端末からの要求に応じて前記通信ネットワークに接続したプリント装置にデータをプリントアウトするサービスを行うものであって、前記ユーザ端末からプリントサービス提供者のサーバに対して前記通信ネットワークを介して印刷要求を送り、前記印刷要求に応じて、前記サーバのメモリ装置の前記ユーザのデータを格納するために割り当てられたメモリ領域から該データを読み出して前記通信ネットワークを介して前

記プリント装置に前記データを送信し、前記プリント装置が前記サーバから送信されたデータをプリントアウトし、前記データのプリントアウトに応じた課金を前記ユーザに対して行う。

【０００７】
【実施例】以下、本発明によるデータをプリントアウトをさせるサービスについて図面を参照して具体的に説明する。ユーザは携帯電話のような端末１あるいはパソコン５からインターネット２を介してプリントサービス会社のウエブサイト（ＡＳＰ３）にアクセスし、そのサイトのホームページにある設定画面上で、プリントしたいデータ（文書テキスト、静止画像）の送信と、保存要求、印刷要求、プリントアウトする場所（店舗など）の指定、印刷枚数指定、用紙サイズ指定、文字指定、色指定、拡大率等の情報の入力をする。なお、ＡＳＰとはアプリケーション・サービス・プロバイダの略である。プリントアウト可能な場所（店舗）については、ＡＳＰ３のホームページで地図を表示し、その地図上にプリンタの配置された店舗をアイコンで表示し、ユーザがその地図画面の店舗をポインタでクリックして指定することもできる。なお、本図面では説明を判りやすくするために、プリンタを４と７の二つ、ユーザの携帯電話１あるいはユーザのパソコン５はそれぞれ一つしかネットワーク２に接続してないように図示しているが、実際には、もっと多数のプリンタ設置店が配置され、多数のユーザがネットワークに接続している。

【０００８】それらの印刷のための情報を受け取ったＡＳＰ３側では、その情報を受信すると、ユーザが指定の店舗（コンビニ等）に設置したプリンタ４にインターネット２を介してデータを送信し、プリンタ内のメモリにデータを一時格納する。この場合、あらかじめサービス利用のためにユーザ登録が必要である。

【０００９】ユーザは、ユーザ登録をするとプリントサービスを提供するＡＳＰの会社からユーザ識別番号等が与えられる。ユーザはデータの送信に当り、ユーザ識別番号を入力し、ＡＳＰ３側ではデータの受信と格納を許可する前にその識別番号の認証処理が実施され、認証結果が正しいユーザであることを示した場合に、サービスの実行がなされる。

【００１０】次に、ユーザが店舗４に来店して識別番号か特定のキーワード等をプリンタに入力するとプリントアウトが開始される。あるいは、来店したユーザが自分の携帯電話１や携帯端末などからＡＳＰ３のウエブサイトにプリント要求を送信すると、ＡＳＰ３から店舗のプリンタ４に指定のデータのプリントの要求指令が送信されることで実際のプリントアウトが開始されるようにすることもできる。

【００１１】あるいは、別の形態としては、ユーザの端末１からＡＳＰ３へデータを送信してデータが格納された時点では、まだ店舗のプリンタ４にはデータは送信さ

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場合を例に説明したが、本発明はそれに限るものではない。たとえば、文書以外の画像たとえば写真やイラスト等のプリントアウト（カラー印刷も含む。）や、色々なデータの表やグラフ、設計図などについてもプリントアウトのサービスを提供することができる。また、印刷媒体を紙以外のＴシャツやプラスチックなどにもすることとができるようなプリンタを配置すれば、ビジネスユーザ以外のユーザにも様々なプリンタの利用サービスを提供することができるであろう。

【００２２】このサービスの他の利用例として、一度に　10
多数の異なるプリンタ（設置店舗）に同じデータをプリントアウトさせて、複数の利用者にプリントアウトしたデータを提供することもできる。そのような場合はまた、多くの部数の印刷の場合には、１台のプリンタで印刷するよりもより短時間で印刷を完了することができ時間の節約になる。

【００２３】

【発明の効果】本発明によれば、ＡＳＰ上にデータを保存することにより、プリンタが使用できない環境であっても、ＡＳＰにアクセスできる環境であれば、データを　20

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外部のプリンタにプリントアウトすることができ、その場合データの編集やデータ形式の変換なども携帯端末などからも容易にできるという携帯端末ユーザに利便性の高いサービスを提供できるという優れた効果を有する。また、副次的な効果として、プリンタを配置した店舗にプリントアウトのユーザが来店する機会が増えるために、その店舗の本来の販売商品の売上も増大するという効果もあるので、プリントアウトサービスの店舗を増やすことができる。
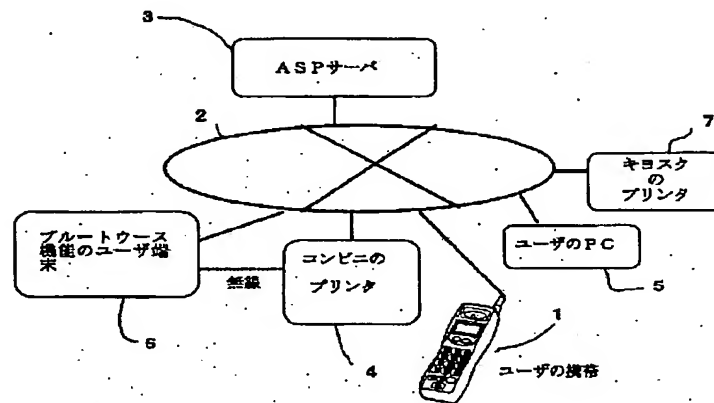
【図面の簡単な説明】

【図１】　本発明の実施例によるデータのプリントアウトのサービスのシステム図。

【符号の説明】

1　　ユーザの携帯電話
2　　インターネット
3　　ＡＳＰサーバ
4　　コンビニのプリンタ
5　　ユーザのパソコン
6　　無線インターフェースを有するユーザ端末
7　　キヨスクのプリンタ

【図１】

フロントページの続き

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	５０４		５０４	
	５０６		５０６	

Ｆターム(参考)　　2C061 AP01 HJ06 HQ17 HX10
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CLAIMS

[Claim(s)]

[Claim 1] The server of the print service provider who has a user terminal linked to a communication network, and has a memory apparatus including the memory area assigned since it connected with said communication network and an agreement user's data were stored, The printing equipment connected to said communication network and said server According to the printing demand from said user terminal, read said user's data from said memory apparatus of said server, and these data are transmitted to said printing equipment through said communication network. Said printing equipment is a print service system characterized by printing out the data transmitted from said server and performing accounting according to print-out of said data to said user.

[Claim 2] It is the approach of offering service which prints out data in the printing equipment connected to said communication network according to the demand from the user terminal linked to a communication network. Said communication network is minded from said user terminal to a print service provider's server. A printing demand Delivery, According to said printing demand, read these data from the memory area assigned since the data of said user of the memory apparatus of said server were stored, and said data are transmitted to said printing equipment through said communication network. How to offer service which is characterized by for said printing equipment printing out the data transmitted from said server, and performing accounting according to print-out of said data to said user and to print out.

[Claim 3] How to offer service according to claim 2 which is characterized by being stored in the memory area assigned since said data were transmitted from said user terminal through said communication network to said server and said transmitted data stored said user's data and to print out.

[Claim 4] How to offer service according to claim 2 which is characterized by carrying out edit or conversion of data format for said user's data through said communication network from said user terminal and to print out.

[Claim 5] How for said server to display a predetermined format for data on said server homepage, to open said homepage from said user terminal, to input desired data on said predetermined format, and to offer service according to claim 2 which is characterized by storing the inputted data in the memory area assigned since said user's data were stored and to print out.

[Claim 6] How to offer service according to claim 2 which is characterized by the thing of

both the magnitude of the memory area assigned since the agreement concerning print-out service is made among said print service providers and said users and said user's data are stored, the access time to said server, data conversion, data editing or one of counts, and the amount of the data to print out for which said accounting amount of money is defined according to either at least and to print out.

[Claim 7] Said user terminal is the approach of offering service according to claim 2 which is characterized by being a cellular phone, a personal computer, or a pocket data-processing terminal unit and to print out.

[Claim 8] It is the approach of offering the service which prints out data in the printing equipment connected to said communication network according to the demand from the user terminal linked to a communication network. A print service provider's server minds said communication network. A printing demand from said user terminal Reception, According to said printing demand, read these data from the memory area assigned since the data of said user of the memory apparatus of said server were stored, and said data are transmitted to said printing equipment through said communication network. How to offer the service which is characterized by charging to said user as a countervalue of the processing in which said printing equipment prints out the data transmitted from said server and to print out.

[Claim 9] The data format of the data of said memory area of said memory apparatus is transformed into the data format which can be edited by said user terminal on said server. Store in said memory area the data from which this data format was changed, and the data into which said data format was changed from said memory area are read to said user terminal. Edit said data which carried out reading appearance on said user terminal, and it stores in said memory area of said server through said communication network. According to a printing demand, said edited data of said memory area are transmitted to said printing equipment through said communication network. How to offer the service according to claim 2 which is characterized by charging to said user as a countervalue of the processing in which said printing equipment prints out the data transmitted from said server and to print out.

[Claim 10] The data format of the data of said memory area of said memory apparatus is transformed into another data format on said server. Store in said memory area the data from which this data format was changed, and edit the data from which said data format was changed on said server, and it stores in said memory area of said server. According to a printing demand, said edited data of said memory area are transmitted to said printing equipment through said communication network. How to offer the service according to claim 2 which is characterized by charging to said user as a countervalue of the processing in which said printing equipment prints out the data transmitted from said server and to print out.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]

[Field of the Invention] This invention relates to the system and approach for offering the service which prints out desired data (a document and image) from the printing equipment arranged in the external predetermined location from the pocket information processing terminal unit called a personal computer (a personal computer is called hereafter.) without a printing equipment, and PDA, or a cellular phone (PHS also being included.).
[0002]
[Description of the Prior Art] In order a printer generally is not attached (such a thing is named generically and a personal digital assistant is called hereafter.) and to print out the drawn-up document, it is necessary to go to a location with a terminal and the suiting printer, and to connect and print a personal digital assistant in the small personal computer of the pocket mold called the so-called laptop computer, PDA, etc. Therefore, when there are only a location without a printer and a printer by which a personal digital assistant and an interface do not suit, since the drawn-up document cannot be printed out, it is inconvenient.
[0003] For example, suppose that operating personnel showed the customer the estimate for an agreement in the business talk scene of exchanging an agreement with a customer on the way. When a customer has not agreed with the content of the estimate but a number, a class or the amount of money of modification of an estimated content, for example, the goods of an order, etc. is changed, it is desirable to rewrite an estimate immediately on that spot and to make a contract of it.
[0004] However, if there is no printer near it even if it is able to perform Make Changes of an estimate using a personal digital assistant, it cannot publish a new estimate. Conventionally, when Make Changes of an estimate arises, since operating personnel rewrite an estimate to their company with the personal computer in return and their company etc., they take an appointment with a customer again, they require time and effort and time amount dramatically in order to go to a customer's firm once again, and cannot once perform smooth dealings operation. Moreover, there was also disadvantage that the response of correction could not be immediately performed even if a mistake, a printing mistake, etc. of an estimate are discovered in a customer's place.
[0005]
[Problem(s) to be Solved by the Invention] This invention solves the above-mentioned trouble, and even if it is an environment which does not have printer equipment in its personal digital assistant equipment, it aims at offering the service which makes the printer arranged by the service firm at every place print out data from a personal digital assistant.
[0006]
[Means for Solving the Problem] The system and approach of offering service by this invention to print out It is what offers service which prints out data in the printing equipment connected to said communication network according to the demand from the user terminal linked to a communication network. Said communication network is minded from said user terminal to a print service provider's server. A printing demand Delivery, According to said printing demand, read these data from the memory area assigned since the data of said user of the memory apparatus of said server were stored, and said data are transmitted to said printing equipment through said communication network. Said

printing equipment prints out the data transmitted from said server, and accounting according to print-out of said data is performed to said user.

[0007]

[Example] Hereafter, the data based on this invention are concretely explained with reference to a drawing about the service which makes it print out. A user accesses the website (ASP3) of a print service firm through the Internet 2 from a terminal 1 like a cellular phone, or a personal computer 5, and inputs information, such as transmission of data (a document text, static image) to print, assignment of the locations (store etc.) which preservation- require, printing- require and are print out, printing number of sheets assignment, paper size assignment, alphabetic character assignment, color specification, and a dilation ratio, on the setting out screen in the homepage of the site. In addition, ASP is abbreviation of an application service provider. About the location (store) which can be printed out, a map can be displayed by the homepage of ASP3, the store where the printer has been arranged on the map can be displayed by the icon, and a user can also click and specify the store of the map screen with a pointer. In addition, in order to give explanation intelligible in this drawing, although the printer is illustrated as only one has connected with a network 2, many printer installation stores have been arranged more and, as for two, 4 and 7, a user's cellular phone 1, or a user's personal computer 5, many users are connecting it to a network actually, respectively.

[0008] In the ASP3 side which received the information for those printings, if the information is received, a user will transmit data to the printer 4 installed in the appointed **** (convenience store etc.) through the Internet 2, and will do the temporary storage of the data to the memory in a printer. In this case, user registration is required beforehand because of service utilization.

[0009] If a user does user registration, a user-identification number etc. will be given from the firm of ASP which offers print service. A user inputs a user-identification number in transmission of data, and in the ASP3 side, when authentication processing of the identification number is carried out and it is shown that an authentication result is a right user before permitting reception and storing of data, activation of service is made.

[0010] Next, print-out will be started, if a user comes to the store at a store 4 and inputs an identification number, a specific keyword, etc. into a printer. Or if the user who came to the store transmits a print request to the website of ASP3 from his own cellular phone 1, personal digital assistant, etc., actual print-out can be started by the demand command of the print of the appointed data being transmitted to the printer 4 of a store from ASP3.

[0011] Or it will begin, if data are not transmitted to the printer 4 of a store yet when data are transmitted to ASP3 from a user's terminal 1 and data are stored as another gestalt, but a user transmits a print request to the website of ASP3 from the terminals 1, such as a cellular phone, when a user comes to the store, and from ASP3, it is transmitted to the printer 4 of a store and data can be printed out succeedingly. In this case, there is little memory space by the side of a printer, and it will end.

[0012] Or when data are transmitted and stored in ASP3 from a user's terminal 1 as still more nearly another operation gestalt, the thing which specify time of day of the store which wants to print out, and print-out, and a user comes to the store at the appointed time of day, and waits for the completion of print-out or by which the employee of a store

(4) was printed out is kept, and the user who came to the store to convenient time amount can also be passed by ******. In order for a user to check that he is the right user who demanded the print-out in such personal delivery, it is necessary to check with an identification number etc.

[0013] As an example of the collection approach of a tariff, in case user registration is carried out by the homepage of the site of ASP3, the account number of a user's credit card is also recorded, and there is a gestalt by which a claim is carried out to a user's account whenever it requests a print on a web. Moreover, when tariff charge equipment is put side by side to the printer and there is the charge of a predetermined tariff, the information is transmitted to ASP3 and there is also a gestalt which sends a print-out initiation command and carries out printing initiation to a printer by the ASP3 side. In the case of the latter, tariff information needs to be transmitted from ASP3 at a printer. Or in the case of an owner man store, if a user pays a tariff to a salesclerk, a gestalt on which a salesclerk pushes the initiation switch of a printer will also be considered.

[0014] As the accounting item as a countervalue of service to a user, The magnitude of the memory area assigned to the user in a first-time registration fee and the server of ASP3, In carrying out edit or data-format conversion within the charge of management according to the duration of service of the memory area etc., and ASP3, data The amount of utilization (time amount charge etc.), Moreover, a user is charged combining suitably items, such as a charge of utilization according to the amount (pagination and byte count) of the data to print out, and it pulls down from the account of a user's credit card, or pays with means, such as bank transfer and mail transfer.

[0015] The utilization opportunity of service can also be given to those who contract with a print-out service firm beforehand, and are not doing user registration. if the new non-register user for whom print-out be needed hurriedly input the conditions of choice of printing on the homepage of ASP3 (the charge of data, printing number of sheets, printing location, etc.), ASP3 will display the tariff of service of the printing condition, and if a user make it acceptance and input the number of its own credit card into it, service of print-out can be receive by predetermined ****. Probably, in sudden utilization of a non-registered first time user, you may consider as accounting setting out higher than a registered user's dues.

[0016] With one's pocket personal computer 5, the operating personnel who correspond with a customer in an example when modification of an estimate arises in a business talk with a customer edit modification or additional correction, or telephone the content of the estimate to another official in charge of their company from a cellular phone 1, and direct and edit edit of an estimate. And the data of the edited estimate are transmitted to ASP3 through the Internet 2. And if a print request is sent to ASP3 from a personal computer 5 or a cellular phone 1, data [finishing / edit to the printer 4 specified by a user] are transmitted and printed out. In that case, the location to print out should just choose the most convenient available location from the location in a business talk.

[0017] When it is going to edit data using a personal computer without the software for data editing, once changing data into the data format which can be edited with the personal computer in a high data format of versatility within ASP3, the data into which it edited into by having downloaded in the personal computer, and the changed data was

edited can be uploaded to ASP3, and a print can also be presented. Moreover, where special data are also changed into the high data format (for example, html, pdf, etc.) of versatility, edit of data is attained also from on ASP3 by saving at ASP3.

[0018] If edit processing is carried out within ASP3, heavy data with which actuation becomes slow, and after once downloading data in a user's personal computer from ASP3 and carrying out processing of edit or a check on a user's personal computer to check data over many hours thoroughly, data can be uploaded to ASP3 and a printing demand can also be applied to it.

[0019] Moreover, some kinds of basic forms of document documents with a user's high operating frequency (estimate etc.) are prepared in ASP3, and a user chooses the form and may be made to input only desired data into the blank in the form from a personal digital assistant beforehand. In that case, correction of data can be easily made from a personal digital assistant side.

[0020] As an arrangement location of a printer, there is nothing to restrict only to the convenience store of the above-mentioned example. As the location in which many businessmen and men tend to gather if it contract with reception of a gas station and an enterprise , a lobby or the lobby of a large-sized apartment , etc. and a printer be arrange in as many locations as possible , the convenience of service will increase more in the airplane in the train in the hole of a station , KIYOSUKU and a government office , a court , a school , the geisha restaurant lobby of an airdrome , a hospital , a supermarket , a department store , the photograph lab , the restaurant , the hotel , and the tenant building .

[0021] In addition, as the drawing showed, the personal digital assistant equipment 6 which has a wireless interface like Bluetooth to a network 2 can be connected as a user's personal digital assistant, and printing demand, transmission of data, etc. can also be performed. In explanation of the example of this invention, although the case of print-out of an estimate was explained to the example, this invention is not restricted to it. For example, service of print-out can be offered also about the table and graph of print-out (color printing is also included.) of an illustration, the images, for example, the photograph, other than a document, etc., and various data, and engineering drawing. Moreover, if a printer to which print media is made as for T-shirts, plastics, etc. other than paper is arranged, users other than a business user will also be able to be provided with utilization service of various printers.

[0022] The data which were made to print out the data same as other examples of utilization of this service as the printer (installation store) by which a large number differ at once, and were printed out to two or more users can also be offered. In such a case, printing can be completed more in a short time, and it becomes economization of time amount again rather than it prints by one set of a printer in printing of many number of copies.

[0023]

[Effect of the Invention] If it is the environment which can access ASP even if it is the environment which cannot use a printer by saving data on ASP according to this invention, data can be printed out to an external printer and it has the outstanding effectiveness that the personal digital assistant user that edit of data, conversion of data format, etc. can be easily performed from a personal digital assistant etc. in that case can be provided with

high service of convenience. Moreover, since it is effective in the sales of the original sale goods of the store increasing in order that the opportunity for the user of print-out to come to the store as secondary effectiveness at the store which has arranged the printer may increase, **** of print-out service can be increased.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] The system chart of service of print-out of the data based on the example of this invention.
[Description of Notations]
1 User's Cellular Phone
2 Internet
3 ASP Server
4 Printer of Convenience Store
5 User's Personal Computer
6 User Terminal Which Has Wireless Interface
7 Printer of KIYOSUKU